

WHAT IS CLAIMED IS:

Subar 1. A method of assembling a photofinishing customer order having at least one component for subsequent distribution to a customer, the method comprising the steps of:

associating a customer order identification with said customer order;

automatically dispensing at least one first type of component onto a first conveyor based on the customer order identification so as to form an order group which includes said at least one first type of component;

conveying said order group from said first conveyor to a second conveyor;

automatically dispensing at least one second type of component into said order group on said second conveyor to create an assembled product group; and

shrink wrapping the assembled product group.

2. A method according to claim 1, wherein said at least one first type of component includes at least one of an order bag, an APS package, negatives, an index card, individual prints, and digital products.

3. A method according to claim 2, wherein said digital products include at least one of a photo CD or a floppy disk.

4. A method according to claim 1, wherein said at least one second type of component includes at least one of wallet and promotional inserts, coupons, an on-line upload card, and a backing card.

5. A method according to claim 1, wherein said at least one first type of component includes at least one of wallet and promotional inserts, coupons, an online upload card and a backing card.

6. A method according to claim 1, wherein said at least one second type of component includes at least one of an APS package, negatives, an index card, individual prints, and digital products.

7. A method according to claim 1, further comprising a plurality of said first type of components,) wherein said step of automatically dispensing the at least one first type of component onto the first conveyor comprises automatically dispensing each of the plurality of first type of components onto said first conveyor at different points along a longitudinal direction of said first conveyor.

8. A method according to claim 1, wherein said step of automatically dispensing the at least one first type of component onto said first conveyor comprises:

dispensing an order bag on said first conveyor to start said order group;

dispensing an APS package into said order group, said APS package being dispensed on top of the order bag already on said first conveyor, said APS package comprising at least an index card and an APS cartridge containing negatives; and

dispensing (cut and banded prints) into said order group, said cut and banded prints being dispensed on top of the APS package.

9. A method according to claim 8, wherein said step of dispensing the at least one first type of component onto said first conveyor further comprises: dispensing (at least one of a floppy disk (or a photo CD) on top of said cut and banded prints.

10. A method according to claim 9, wherein said step of automatically dispensing said at least one second type of component comprises: dispensing at least one of promotional and wallet inserts, coupons and an upload card on top of an uppermost one of a floppy disk or a photo CD in said order group; and

dispensing a backing card on top of an uppermost one of promotional and wallet inserts, coupons or an upload card in said order group to form said assembled product group.

11. A method according to claim 1, further comprising:
heat sealing said shrunk wrapped assembled product group by conveying said assembled product group through a heat tunnel.

12. A method of assembling a photofinishing customer order, the method comprising the step of:

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dispensing at least one of photofinishing products, retail products or general products in accordance with a customer order, onto a conveyor at different points along a direction of travel of the conveyor, the products being dispensed one on top of the other to form a stack of the products on the conveyor.

13. A method according to claim 12, further comprising the step of:
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shrink wrapping the stack of products.

14. A method according to claim 12, further comprising the step of:
inserting the stack of products into a product bag.

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15. A photofinishing assembling system comprising:
at least one first conveyor for conveying photofinishing components pertaining to a customer order;
a first dispensing system for dispensing the photofinishing components onto the first conveyor in a manner in which an order group of the photofinishing components is formed on the first conveyor;
a second conveyor adapted to receive the order group of photofinishing components from the first conveyor; and

a second dispensing system for dispensing at least one of retail components or general components into said order group on the second conveyor to create an assembled product group which includes at least one of said photofinishing components, said retail components and said general components.

16. An assembly system according to claim 15, further comprising:
a shrink wrapper for shrink wrapping the assembled product group in a shrunk web.

17. An assembling system according to claim 15, further comprising:
an enclosing unit for enclosing the assembled product group in an enclosure.

18. An assembling system according to claim 15, wherein said photofinishing components include at least one of an order bag, an APS cartridge, negatives, an index card, individual prints, and digital components.

19. An assembling system according to claim 20, wherein said digital components include at least one of a photo CD or a floppy disk.

20. An assembling system according to claim 15, wherein said retail or general components include at least one of wallet and promotional inserts, coupons, an on-line upload card, and a backing card.

21. An assembling system according to claim 15, wherein said photofinishing components comprises an order bag, and an APS package; and said first dispensing system comprises:
an order bag dispenser for dispensing an order bag onto the first conveyor;

an APS dispenser for dispensing an APS package including an APS cartridge having negatives and an index card onto the first conveyor on top of the order bag to start said order group; and

a print dispenser adapted to dispense banded prints on top of the APS package in the order group.

22. An assembling system according to claim 21, wherein said retail or general components comprise at least one of promotional inserts, wallet inserts, coupons, an up-load card, a floppy disk, a photo CD, and a backing card; and

said second dispensing system comprises:

an insert dispensing system for dispensing at least one of a promotional insert, a wallet insert, or a coupon into said order group at a first location of said second conveyor;

a digital component dispenser for dispensing at least one of a photo-CD or a floppy disk into said order group at a second location of said second conveyor downstream of said first location with respect to a direction of travel of said order group;

an upload card dispenser for dispensing an upload card into said order group at a third location of said second conveyor downstream of said second location with respect to the direction of travel of said order group; and

a backing card dispenser for dispensing a backing card into said order group at a fourth location of said second conveyor downstream of said third location with respect to the direction of travel of said order group.

23. A photofinishing assembling system comprising:

a conveying system adapted to convey products pertaining to a photofinishing customer order; and

a dispensing system adapted to dispense the products onto the conveying system at different points along a direction of travel of the conveying system, the products being dispensed one on top of the other to form an assembled stack of products on the conveying system.

24. An assembling system according to claim 23, wherein said products comprise at least one of a photofinishing product, a retail product or a general product.

25. An assembling system according to claim 23, further comprising:
a shrink wrapper for shrink wrapping the assembled stack in a shrunk web.

26. An assembling system according to claim 23, further comprising:
an enclosing unit for enclosing the assembled stack in an enclosure.

27. A method of assembling products associated with a photofinishing customer order, the method comprising the steps of:
placing product dispensers dedicated to a specific type of product along a conveying system, such that an order in which the products dispensers are placed establishes a sequence for dispensing the products onto the conveying system; and

dispensing said products onto said conveying system in accordance with said customer order and in the sequence established by the placement of said product dispensers.

28. A method according to claim 27, wherein said dispensing step further comprises:

dispensing said products onto said conveying system to form an order group of said products pertaining to said customer order.

29. A method according to claim 27, wherein said products are at least one of photofinishing products, retail products or general products.

30. A method according to claim 28, wherein said order group defines a stack of said products.

31. A method according to claim 28, further comprising:
shrink wrapping the order group in a shrink web.

32. A method according to claim 28, further comprising:
inserting the order group in an enclosure.

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33. A computer program product, comprising a computer readable storage medium having a computer program stored thereon which when loaded into the computer causes the computer to control an assembling of a photofinishing customer order having at least one component by performing the steps of:

associating a customer order identification with said customer order;

dispensing at least one first type of component onto a first conveyor based on the customer order identification so as to form an order group which includes said at least one first type of component;

conveying said order group from said first conveyor to a second conveyor; and

dispensing at least one second type of component into said order group on said second conveyor to create an assembled product group.

34. A computer program product according to claim 33, further comprising the step of:

shrink wrapping the assembled product group.

35. A computer program product according to claim 33, further comprising the step of:

enclosing the assembled product group in an enclosure.

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36. A computer program product, comprising a computer readable storage medium having a computer program stored thereon which when loaded into the computer causes the computer to control the assembling of a photofinishing customer order by performing the steps of:

associating a customer order identification with said customer order; and

dispensing at least one of photofinishing products, retail products or general products onto a conveyor at different points along a direction of travel of the conveyor, the products being dispensed one on top of the other to form a stack of the products on the conveyor.

37. A computer program product according to claim 36, further comprising the step of:

shrink wrapping the stack of products.

38. A computer program product according to claim 36, further comprising the step of:

inserting the stack of products in an enclosure.

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39. A computer program product comprising a computer readable storage medium having a computer program stored thereon which when loaded into the computer causes the computer to assemble a photofinishing customer order by performing the steps of:

associating a customer order identification with said customer order; and

automatically dispensing at least one of a photofinishing product, a retail product and a general product onto said conveying system in accordance with said customer order and a sequence defined by product dispensers which are laid out along the conveying system.

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40. A photofinishing assembling system comprising:
at least one first conveyor for conveying first components
pertaining to a customer order;
a plurality of first dispensers for dispensing the first components
onto the first conveyor in a manner in which an order group of the first
components is formed on the first conveyor;
a second conveyor adapted to receive the order group of
photofinishing components from the first conveyor; and
a plurality of second component dispensers for dispensing second
components into said order group on the second conveyor to create an assembled
product group which includes said first components and said second components.

41. A photofinishing assembling system according to claim 40,
further comprising:
a shrink wrapper for shrink wrapping the assembled product group
in a shrunk web.

42. A photofinishing assembling system according to claim 40,
further comprising:
an enclosing unit for enclosing the assembled product group in an
enclosure.

43. A photofinishing assembly system according to claim 40,
wherein:
each one of said plurality of first dispensers is designed to dispense
a specific type of first component in the form of a photofinishing component, a
retail component or a general product onto said first conveyor; and
each of said plurality of second dispensers is designed to dispense a
specific type of second component in the form of a photofinishing component, a
retail component or a general component onto said second conveyor.

253 1 44. A method of assembling a photofinishing customer order
2 having at least one photofinishing component, one retail component and one
3 general component for subsequent distribution to a customer, the method
4 comprising the steps of:

5 associating a customer order identification with said customer
6 order;

7 dispensing the at least one photofinishing component onto (said first ^{MAB}
8 conveyor) based on the customer order identification so as to form an order group
9 which includes said at least one photofinishing component;

10 conveying said order group from said first conveyor to a second
11 conveyor;

12 dispensing at least one retail component or general component into
13 said order group on said second conveyor to create an assembled product group;
14 and

15 inserting the assembled product group into an enclosure.